



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

10/056,531 A

Source:

IFW0

Date Processed by STIC:

6/21/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):  
U.S. Patent and Trademark Office, 220 20<sup>th</sup> Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202 -

Revised 05/17/04



IFWO

## RAW SEQUENCE LISTING

DATE: 06/21/2004

PATENT APPLICATION: US/10/656,531A

TIME: 16:17:40

Input Set : A:\CTCH-P01-016.TXT

Output Set: N:\CRF4\06212004\J656531A.raw

4 <110> APPLICANT: Baltimore, David  
 5       Porteus, Matthew  
 7 <120> TITLE OF INVENTION: USE OF CHIMERIC NUCLEASES TO STIMULATE  
 8       GENE TARGETING  
 10 <130> FILE REFERENCE: CTCH-P01-016  
 12 <140> CURRENT APPLICATION NUMBER: 10/656,531A  
 13 <141> CURRENT FILING DATE: 2003-09-05  
 15 <150> PRIOR APPLICATION NUMBER: 60/408,454  
 16 <151> PRIOR FILING DATE: 2002-09-05  
 18 <150> PRIOR APPLICATION NUMBER: 60/484,788  
 19 <151> PRIOR FILING DATE: 2003-07-03  
 21 <150> PRIOR APPLICATION NUMBER: 60/419,341  
 22 <151> PRIOR FILING DATE: 2002-10-17  
 24 <160> NUMBER OF SEQ ID NOS: 52  
 26 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 28 <210> SEQ ID NO: 1  
 29 <211> LENGTH: 18  
 30 <212> TYPE: DNA  
 31 <213> ORGANISM: Unknown  
 33 <220> FEATURE:  
 34 <223> OTHER INFORMATION: Oligonucleotide  
 36 <400> SEQUENCE: 1  
 37 tagggataac agggtaat  
 39 <210> SEQ ID NO: 2  
 40 <211> LENGTH: 9  
 41 <212> TYPE: DNA  
 42 <213> ORGANISM: Unknown  
 44 <220> FEATURE:  
 45 <223> OTHER INFORMATION: Oligonucleotide  
 47 <400> SEQUENCE: 2  
 48 ggggaagaa  
 50 <210> SEQ ID NO: 3  
 51 <211> LENGTH: 9  
 52 <212> TYPE: DNA  
 53 <213> ORGANISM: Unknown  
 55 <220> FEATURE:  
 56 <223> OTHER INFORMATION: Oligonucleotide  
 58 <400> SEQUENCE: 3  
 59 gcgtggtcg  
 61 <210> SEQ ID NO: 4  
 62 <211> LENGTH: 9  
 63 <212> TYPE: DNA  
 64 <213> ORGANISM: Unknown

**Does Not Comply**  
**Corrected Diskette Needed**

(pg. 4-5)

18

9

9

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Output Set: N:\CRF4\06212004\J656531A.raw

```

66 <220> FEATURE:
67 <223> OTHER INFORMATION: Oligonucleotide
69 <400> SEQUENCE: 4
70 gatgttgct 9
72 <210> SEQ ID NO: 5
73 <211> LENGTH: 15
74 <212> TYPE: DNA
75 <213> ORGANISM: Unknown
77 <220> FEATURE:
78 <223> OTHER INFORMATION: Oligonucleotide
W--> 80 <221> NAME/KEY: misc_feature
81 <222> LOCATION: (5)...(10)
82 <223> OTHER INFORMATION: n = A,T,C or G
W--> 84 <400> 5
W--> 85 gatgnnnnnn ttgct 15
87 <210> SEQ ID NO: 6
88 <211> LENGTH: 9
89 <212> TYPE: DNA
90 <213> ORGANISM: Unknown
92 <220> FEATURE:
93 <223> OTHER INFORMATION: Oligonucleotide
W--> 95 <221> NAME/KEY: misc_feature
96 <222> LOCATION: 2,3,5,6,8,9
97 <223> OTHER INFORMATION: n = A,T,C or G
W--> 99 <400> 6
W--> 100 gnnngnnngnn 9
102 <210> SEQ ID NO: 7
103 <211> LENGTH: 24
104 <212> TYPE: DNA
105 <213> ORGANISM: Homo sapiens
107 <220> FEATURE:
108 <221> NAME/KEY: misc_feature
109 <222> LOCATION: 1,2,4,5,7,8
110 <223> OTHER INFORMATION: n = A,T,C or G
112 <221> NAME/KEY: misc_feature
113 <222> LOCATION: (10)...(15)
114 <223> OTHER INFORMATION: n= A,T,C or G
W--> 116 <221> misc_feature
117 <222> LOCATION: 17,18,20,21,23,24
118 <223> OTHER INFORMATION: n=A,T,C or G
W--> 120 <400> 7
W--> 121 nncnnncnnn nnnnnngnnngn ngnn 24
123 <210> SEQ ID NO: 8
124 <211> LENGTH: 9
125 <212> TYPE: DNA
126 <213> ORGANISM: Unknown
128 <220> FEATURE:
129 <223> OTHER INFORMATION: Oligonucleotide
131 <400> SEQUENCE: 8

```

## RAW SEQUENCE LISTING

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Input Set : A:\CTCH-P01-016.TXT

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132	ggggaagaa	9
134	<210> SEQ ID NO: 9	
135	<211> LENGTH: 8	
136	<212> TYPE: DNA	
137	<213> ORGANISM: Unknown	
139	<220> FEATURE:	
140	<223> OTHER INFORMATION: Oligonucleotide	
142	<400> SEQUENCE: 9	
143	gcgtggcg	8
145	<210> SEQ ID NO: 10	
146	<211> LENGTH: 24	
147	<212> TYPE: DNA	
148	<213> ORGANISM: Unknown	
150	<220> FEATURE:	
151	<223> OTHER INFORMATION: Oligonucleotide	
153	<400> SEQUENCE: 10	
154	accatcttct tcaaggacga cggc	24
156	<210> SEQ ID NO: 11	
157	<211> LENGTH: 9	
158	<212> TYPE: DNA	
159	<213> ORGANISM: Unknown	
161	<220> FEATURE:	
162	<223> OTHER INFORMATION: Oligonucleotide	
164	<400> SEQUENCE: 11	
165	gaagatggt	9
167	<210> SEQ ID NO: 12	
168	<211> LENGTH: 9	
169	<212> TYPE: DNA	
170	<213> ORGANISM: Unknown	
172	<220> FEATURE:	
173	<223> OTHER INFORMATION: Oligonucleotide	
175	<400> SEQUENCE: 12	
176	gacgacggc	9
178	<210> SEQ ID NO: 13	
179	<211> LENGTH: 24	
180	<212> TYPE: DNA	
181	<213> ORGANISM: Unknown	
183	<220> FEATURE:	
184	<223> OTHER INFORMATION: Oligonucleotide	
186	<400> SEQUENCE: 13	
187	ggcgcccacc atcgcgtcgc agcc	24
189	<210> SEQ ID NO: 14	
190	<211> LENGTH: 9	
191	<212> TYPE: DNA	
192	<213> ORGANISM: Unknown	
194	<220> FEATURE:	
195	<223> OTHER INFORMATION: Oligonucleotide	
197	<400> SEQUENCE: 14	
198	gtgggcgcc	9

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TIME: 16:17:40

Input Set : A:\CTCH-P01-016.TXT

Output Set: N:\CRF4\06212004\J656531A.raw

200 <210> SEQ ID NO: 15  
 201 <211> LENGTH: 9  
 202 <212> TYPE: DNA  
 203 <213> ORGANISM: Unknown  
 205 <220> FEATURE:  
 206 <223> OTHER INFORMATION: Oligonucleotide  
 208 <400> SEQUENCE: 15  
 209 gtcgcagcc 9  
 211 <210> SEQ ID NO: 16  
 212 <211> LENGTH: 168  
 213 <212> TYPE: DNA  
 214 <213> ORGANISM: Unknown  
 216 <220> FEATURE:  
 217 <223> OTHER INFORMATION: Oligonucleotide  
 219 <400> SEQUENCE: 16  
 220 actagcaacc tcaaacagac accatggtgc atctgactcc tgaggagaag tctgccgtta 60  
 221 ctgccctgtg gggcaaggtg aacgtgatcg ttggagtttg tctgtggtac cacgtagact 120  
 222 gaggactcct cttcagacgg caatgacggg acaccccggt ccacttgc 168  
 224 <210> SEQ ID NO: 17  
 225 <211> LENGTH: 9  
 226 <212> TYPE: DNA  
 227 <213> ORGANISM: Unknown  
 229 <220> FEATURE:  
 230 <223> OTHER INFORMATION: Oligonucleotide  
 232 <400> SEQUENCE: 17  
 233 gaggttgct  
 235 <210> SEQ ID NO: 18  
 236 <211> LENGTH: 7  
 237 <212> TYPE: PRT  
 238 <213> ORGANISM: Unknown  
 240 <220> FEATURE:  
 241 <223> OTHER INFORMATION: Peptide  
 243 <400> SEQUENCE: 18  
 244 Gln Ser Ser Asp Leu Thr Arg  
 245 1 5  
 248 <210> SEQ ID NO: 19  
 249 <211> LENGTH: 7  
 250 <212> TYPE: PRT  
 251 <213> ORGANISM: Unknown  
 253 <220> FEATURE:  
 254 <223> OTHER INFORMATION: Peptide  
 256 <400> SEQUENCE: 19  
 257 Thr Ser Gly Glu Leu Val Arg  
 258 1 5  
 261 <210> SEQ ID NO: 20  
 262 <211> LENGTH: 7  
 263 <212> TYPE: PRT  
 264 <213> ORGANISM: Unknown  
 266 <220> FEATURE:

## RAW SEQUENCE LISTING

DATE: 06/21/2004

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TIME: 16:17:40

Input Set : A:\CTCH-P01-016.TXT

Output Set: N:\CRF4\06212004\J656531A.raw

267 &lt;223&gt; OTHER INFORMATION: Peptide

- SAME ERROR

269 &lt;400&gt; SEQUENCE: 20

270 Thr Ser Gly Ala Leu Thr Arg

271 1 5

274 &lt;210&gt; SEQ ID NO: 21

275 &lt;211&gt; LENGTH: 7

276 &lt;212&gt; TYPE: PRT

277 &lt;213&gt; ORGANISM: Unknown

279 &lt;220&gt; FEATURE:

280 &lt;223&gt; OTHER INFORMATION: Peptide

- SAME ERROR

282 &lt;400&gt; SEQUENCE: 21

283 Thr Ser Gly Ser Leu Thr Arg

284 1 5

287 &lt;210&gt; SEQ ID NO: 22

288 &lt;211&gt; LENGTH: 7

289 &lt;212&gt; TYPE: PRT

290 &lt;213&gt; ORGANISM: Unknown

292 &lt;220&gt; FEATURE:

293 &lt;223&gt; OTHER INFORMATION: Peptide

- SAME ERROR

295 &lt;400&gt; SEQUENCE: 22

296 Arg Ser Asp Asn Leu Thr Arg

297 1 5

300 &lt;210&gt; SEQ ID NO: 23

301 &lt;211&gt; LENGTH: 7

302 &lt;212&gt; TYPE: PRT

303 &lt;213&gt; ORGANISM: Unknown

305 &lt;220&gt; FEATURE:

306 &lt;223&gt; OTHER INFORMATION: Peptide

- SAME ERROR

308 &lt;400&gt; SEQUENCE: 23

309 Arg Ser Asp Asn Leu Val Arg

310 1 5

313 &lt;210&gt; SEQ ID NO: 24

314 &lt;211&gt; LENGTH: 48

315 &lt;212&gt; TYPE: DNA

316 &lt;213&gt; ORGANISM: Unknown

318 &lt;220&gt; FEATURE:

319 &lt;223&gt; OTHER INFORMATION: Oligonucleotide

321 &lt;400&gt; SEQUENCE: 24

322 agcaacctct ctagagcgtg ggcgtcgttg gagagatctc gcaccgcg

48

324 &lt;210&gt; SEQ ID NO: 25

325 &lt;211&gt; LENGTH: 9

326 &lt;212&gt; TYPE: DNA

327 &lt;213&gt; ORGANISM: Unknown

329 &lt;220&gt; FEATURE:

330 &lt;223&gt; OTHER INFORMATION: Oligonucleotide

332 &lt;400&gt; SEQUENCE: 25

333 ggcaagggtg

9

335 &lt;210&gt; SEQ ID NO: 26

336 &lt;211&gt; LENGTH: 7

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/656,531A

DATE: 06/21/2004  
TIME: 16:17:41

Input Set : A:\CTCH-P01-016.TXT  
Output Set: N:\CRF4\06212004\J656531A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 5,6,7,8,9,10

Seq#:6; N Pos. 2,3,5,6,8,9

Seq#:7; N Pos. 1,2,4,5,7,8,10,11,12,13,14,15,17,18,20,21,23,24

## VERIFICATION SUMMARY

DATE: 06/21/2004

PATENT APPLICATION: US/10/656,531A

TIME: 16:17:41

Input Set : A:\CTCH-P01-016.TXT

Output Set: N:\CRF4\06212004\J656531A.raw

L:80 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:84 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:5  
L:85 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:95 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:99 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:6  
L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:116 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7  
L:120 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7  
L:121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0